

Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supercedes: 24-07-2019

KLONDIKE SAE 0W-40 CK-4 Full Synthetic Heavy Duty Engine Oils

1 Identification

Product Identifier: KLONDIKE SAE 0W-40 CK-4 Full Synthetic Heavy Duty Engine Oils
Stock Number:
Other means of identification:
Synonyms: No data available

Recommended use and restrictions on use:
Recommended use: Motor Oil
Restrictions on use: Uses other than those described above

Initial Supplier Identifier: KLONDIKE Lubricants Corporation
3078 275th Street
Langley, BC, V4W 3L4
Canada

Tel No.: General information 1-877-293-4691 info@klondikelubricants.com
Email: Chemtrec (Within US) 1-800-424-9300 Chemtrec (International)
Emergency telephone number and any restrictions on the use of that number, if applicable: 1-703-527-3887

2 Hazard identification

Classification of the hazardous product:
Serious Eye Damage/Eye Irritation Category 2

GHS Hazard class symbols:



Signal word: Warning
Hazard statements: Causes serious eye irritation.
Precautionary statements:
Prevention: Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response: IF IN EYES:: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Other hazards known to the supplier with respect to the hazardous product:

Physical hazards not otherwise classified None known.

Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supersedes: 24-07-2019

Health hazards not otherwise classified None known.

3 Composition/information on ingredients

Chemical Name	Common name and synonyms	CAS registry number and any unique identifiers	Concentration
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	No data available	85940-28-9	1 - 5
Petroleum distillates, solvent dewaxed heavy paraffinic	No data available	64742-65-0	1 - 5
Petroleum distillates, hydrotreated heavy paraffinic	No data available	64742-54-7	45 - 70

4 First-aid measures

Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen.
Eye contact:	Immediately flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician.
Skin Contact:	Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.
Ingestion:	No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this SDS.
The most important symptoms and effects, whether acute or delayed:	Causes serious eye irritation
An indication of immediate medical attention and special treatment needed, if necessary:	No additional first aid information available.

5 Fire-fighting measures

Suitable extinguishing media:	Use alcohol resistant foam, carbon dioxide, or dry chemical when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the surface of the fire. Do not direct a stream of water into the hot burning liquid.
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Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supercedes: 24-07-2019

Unsuitable extinguishing media:	No data available
Specific hazards arising from the hazardous product, such as the nature of any hazardous combustion:	Material may be ignited only if preheated to temperatures above the high flash point, for example in a fire.
Hazardous Combustion Products:	Carbon monoxide, Sulfur containing gases, Nitrogen containing gases, Aldehydes, oxides of phosphorus, Hydrogen sulfide, Smoke
Special protective equipment and precautions for firefighters:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Use methods for the surrounding fire.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill.
Methods and materials for containment and cleaning up:	Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Dispose of according to Federal, State, Local, or Provincial regulations. Used fluid should be disposed of at a recycling center.

7 Handling and storage

Precautions for safe handling:	Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Empty containers may retain product residues/ vapors. Use proper bonding and grounding during bulk product transfer.
Conditions for safe storage:	Store in a cool dry place. Isolate from incompatible materials.
Materials to Avoid/Chemical Incompatibility:	Strong oxidizing agents

8 Exposure controls/personal protection

Control parameters, including occupational exposure limit values or biological limit values and the source of those values:

Canada – Alberta – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits -	Occupational Exposure Limits -	Occupational Exposure Limits -
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Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supersedes: 24-07-2019

	TWAs	STELs	Ceiling
No data available			

Canada – British Columbia– Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
No data available			

Canada – Manitoba – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
No data available			

Canada – New Brunswick – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
No data available			

Canada – Newfoundland & Labrador – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
No data available			

Canada – Northwest Territories – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
No data available			

Canada – Nova Scotia – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
No data available			

Canada – Nunavut – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
No data available			

Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supercedes: 24-07-2019

Canada – Ontario – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
No data available			

Canada – Prince Edward Island – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
No data available			

Canada – Quebec – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAEVs	Occupational Exposure Limits - STEVs	Occupational Exposure Limits - Ceiling
No data available			

Canada – Saskatchewan – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
No data available			

Canada - Yukon – Occupational Exposure Limits:

Chemical Name	Occupational Exposure Limits - TWAs	Occupational Exposure Limits - STELs	Occupational Exposure Limits - Ceiling
No data available			

Chemical Name	OSHA PEL	ACGIH TLV-TWA	ACGIH STEL	IDLH
No data available				

Appropriate engineering controls:

Use local exhaust ventilation or other engineering controls to minimize exposures and maintain operator comfort.

Individual protection measures, such as personal protective equipment:

Respiratory Protection:

Respiratory protection may be required to avoid overexposure when handling this product. General or local exhaust ventilation is the preferred means of protection. Use a respirator if general room ventilation is not available or sufficient to eliminate symptoms.

Respirator Type(s):

None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use

Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supersedes: 24-07-2019

Eye and face protection:	NIOSH/MSHA approved respiratory protection. Wear chemically resistant safety glasses with side shields when handling this product. Wear additional eye protection such as chemical splash goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material. Do not wear contact lenses. Have an eye wash station available.
Skin Protection:	Wear protective gloves. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.
Hand protection:	Neoprene, Nitrile
General hygiene conditions:	Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling.

9 Physical and chemical properties

Physical state:	Liquid
Colour:	Brown
Odour:	Mild
Odour threshold:	Not determined
pH:	No data available
Melting point (°C):	No data available
Freezing point (°C):	No data available
Initial boiling point and boiling range (°C):	No data available
Flash point (°C):	232
Evaporation rate:	No data available
Flammability, in the case of solids and gases:	No data available
Upper flammable or explosive limit, % in air:	= 10
Lower flammable or explosive limit, % in air:	= 1
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	0.85
Solubility:	Negligible; 0-1%
Partition coefficient — n-octanol/water:	No data available
Auto-ignition temperature (°C):	No data available
Decomposition temperature (°C):	Not determined

Safety Data Sheet



Stock Number:
Date of the latest revision of the safety data sheet: 24-08-2019
Supercedes: 24-07-2019

Viscosity: 86.51

10 Stability and reactivity

Reactivity: There are no known reactivity hazards associated with this product.
Chemical stability: Stable under normal conditions.
Possibility of hazardous reactions: None expected under standard conditions of storage.
Conditions to avoid, including static discharge, shock or vibration: Temperatures above the high flash point of this combustible material in combination with sparks, open flames, or other sources of ignition.
Moisture (will lead to product performance degradation).
Incompatible materials: Strong oxidizing agents
Hazardous decomposition products: Carbon monoxide Sulfur containing gases Nitrogen containing gases Aldehydes oxides of phosphorus Hydrogen sulfide Smoke

11 Toxicological information

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): Eye contact, Ingestion, Inhalation, Skin contact

Symptoms related to the physical, chemical and toxicological characteristics: Causes serious eye irritation

Immediate effects from short term exposure:

Inhalation: No hazard in normal industrial use.
Skin Contact: This material is likely to be moderately irritating to skin based on animal data. Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
Eye Contact: Classification is based on pH and the components listed in Section 3.
Ingestion: Estimated to be > 5.0 g/kg. No hazard in normal industrial use.

Delayed and chronic effects from long term exposure:

Carcinogenicity: Not expected to cause cancer. This product meets the IP-346 criteria of <3% PAH's and is not considered a carcinogen by the International Agency for Research on Cancer.
Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.
Mutagenicity: No data available to indicate product or any components present at greater than 0.1% is mutagenic or genotoxic.
Skin Contact: Upon prolonged or repeated contact, can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.
Skin Absorption: Upon prolonged or repeated exposure, no hazard in normal industrial use.

Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supersedes: 24-07-2019

STOT-single exposure: Based on available data, the classification criteria are not met.
STOT-repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.

Numerical measures of toxicity, including ATEs Based on available data, the classification criteria are not met.

12 Ecological information

Ecotoxicity (aquatic and terrestrial, if available): Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.

Ecological Toxicity Data:

Chemical Name	CAS registry number and any unique identifiers	Aquatic EC50 Crustacea	Aquatic ERC50 Algae	Aquatic LC50 Fish
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	Aquatic LC50 (48h) > 1000 mg/L	No data available	Aquatic LC50 (96h) Rainbow Trout > 5000 mg/L
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	Aquatic LC50 (48h) > 1000 mg/L	No data available	Aquatic LC50 (96h) Rainbow Trout > 5000 mg/L

Persistence and degradability: Biodegrades slowly.
Bioaccumulative potential: Bioconcentration may occur.
Mobility in soil: This material is expected to have essentially no mobility in soil. It absorbs strongly to most soil types.
Other adverse effects: None known.

13 Disposal considerations

Information on safe handling for disposal and methods of disposal, including any contaminated packaging: Spent or discarded material is non-hazardous according to environmental regulations.

14 Transport information

Transportation of Dangerous Goods by land (TDG):

UN number: Not regulated for road transport
UN Proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable

International carriage of dangerous goods by sea (IMDG/IMO):

Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supercedes: 24-07-2019

UN number: Not regulated by IMDG
UN Proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable

International carriage of dangerous goods by air (IATA):

UN number: Not regulated by IATA
UN Proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable

Environmental hazards according to the International Maritime Dangerous Goods Code and the United Nations Model Regulations: No

Transport in bulk (according to Annex II of the International Convention for the Prevention of Pollution From Ships, 1973, as modified by the Protocol of 1978 (MARPOL 73/78) and the International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC Code)): No data available

Special precautions in connection with transport or conveyance either within or outside the premises: No data available

15 Regulatory information

Safety, health and environmental regulations, made within or outside Canada, specific to the product in question:

Canada - Domestic Substances List (DSL):

Chemical Name	CAS No	Canada - Domestic Substances List (DSL)
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	Yes
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	Yes
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	Yes

Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supercedes: 24-07-2019

Canada - Non-Domestic Substances List (NDSL):

Chemical Name	CAS No	Canada - Non-Domestic Substances List (NDSL)
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	No
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	No

Canada - Controlled Drugs and Substances:

Chemical Name	CAS No	Schedule I	Schedule II	Schedule III	Schedule IV	Schedule V	Schedule VII	Schedule VIII
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No	No	No	No	No	No	No
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	No	No	No	No	No	No	No
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	No	No	No	No	No	No	No

Chemical Name	CAS No	Class A Precursors	Class B Precursors	Exempt Precursors	Class 1 Targeted Substances	Class 2 Targeted Substances
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No	No	No	No	No
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	No	No	No	No	No
Phosphorodithioic acid, mixed O,O-bis(2-	85940-28-9	No	No	No	No	No

Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supercedes: 24-07-2019

ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts						
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Canada - CEPA - Schedule III Export Control List:

Chemical Name	CAS No	Part 1 Prohibited Substances	Part 2 Substances Subject to Notification or Consent	Part 3 Restricted Substances	Export Control List
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No	No	No	No
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	No	No	No	No
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	No	No	No	No

Canada CEPA - 2015 Greenhouse Gases (GHG) Subject to Mandatory Reporting:

Chemical Name	CAS No	Canada CEPA - 2015 Greenhouse Gases (GHG) Subject to Mandatory Reporting
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	No
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	No

Canada - Narcotic Control Regulations (C.R.C., c. 1041):

Chemical Name	CAS No	Canada - Narcotic Control Regulations (C.R.C., c. 1041)
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No

Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supercedes: 24-07-2019

Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	No
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	No

Canada - Ontario - Toxics Reduction - List of Priority Toxics:

Chemical Name	CAS No	Canada - Ontario - Toxics Reduction - List of Priority Toxics
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	No
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	No

Stockholm Convention on Persistent Organic Pollutants:

Chemical Name	CAS No	Stockholm Convention on Persistent Organic Pollutants
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	No
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	No

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade:

Chemical Name	CAS No	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade .
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Petroleum distillates, solvent dewaxed	64742-65-0	No

Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supercedes: 24-07-2019

heavy paraffinic		
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	No

(United Nations) - Kyoto Protocol - Convention on Climate Change - Greenhouse Gases (GHGs):

Chemical Name	CAS No	(United Nations) - Kyoto Protocol - Convention on Climate Change - Greenhouse Gases (GHGs)
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	No
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	No

Montreal Protocol on Substances that Deplete the Ozone Layer:

Chemical Name	CAS No	Montreal Protocol on Substances that Deplete the Ozone Layer
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	No
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	85940-28-9	No

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.:

Chemical Name	CAS No	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	No
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	No
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr)	85940-28-9	No

Safety Data Sheet



Date of the latest revision of the safety data sheet: 24-08-2019

Supersedes: 24-07-2019

esters, zinc salts		
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16 Other information

Date of the latest revision of the safety data sheet: 24-08-2019

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Reason for revision: Activated by Document Formulation Generation

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